1. Identification of Substance:

**Product Name:** TyrFil EcoFlex, Flex, Pro, Utility Isocyanate Component

**Supplier Identification:**
Accella Tire Fill Systems

**Address:**
Address: 2003 Curtain Pole Rd
Chattanooga, TN 37406

**Telephone:**
(423) 697-0400

**Emergency phone number:**
CHEMTREC (800) 424-9300

**Product Use:** Polyurethane isocyanate component

2. Hazards Identification:

**GHS Ratings:**

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation Toxicity</td>
<td>Acute Tox. 3</td>
<td>Gases: &gt;500+ &lt;=2500 ppm, Vapors: &gt;2+ &lt;=10 mg/l, Dusts &amp; mists: &gt;0.5+ &lt;=1 mg/l</td>
</tr>
<tr>
<td>Skin corrosive</td>
<td>2</td>
<td>Reversible adverse effects in dermal tissue, Draize score: &gt;= 2.3 &lt; 4.0 or persistent inflammation</td>
</tr>
<tr>
<td>Eye corrosive</td>
<td>2A</td>
<td>Eye irritant: Subcategory 2A, Reversible in 21 days</td>
</tr>
<tr>
<td>Respiratory sensitizer</td>
<td>1</td>
<td>Respiratory sensitizer</td>
</tr>
<tr>
<td>Skin sensitizer</td>
<td>1</td>
<td>Skin sensitizer</td>
</tr>
<tr>
<td>Carcinogen</td>
<td>1B</td>
<td>Presumed Human Carcinogen, Based on demonstrated animal carcinogenicity</td>
</tr>
<tr>
<td>Reproductive toxin</td>
<td>2</td>
<td>Human or animal evidence possibly with other information</td>
</tr>
<tr>
<td>Organ toxin single exposure</td>
<td>2</td>
<td>Presumed to be harmful to human health- Animal studies with significant toxic effects relevant to humans at generally moderate exposure (guidance) - Human evidence in exceptional cases</td>
</tr>
<tr>
<td>Organ toxin repeated exposure</td>
<td>1</td>
<td>Significant toxicity in humans- Reliable, good quality human case studies or epidemiological studies Presumed significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally low exposure (guidance)</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>1</td>
<td>Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity ≥ 20.5 mm²/s at 40° C.</td>
</tr>
</tbody>
</table>

**GHS Hazards**

- H304: May be fatal if swallowed and enters airways
- H315: Causes skin irritation
- H317: May cause an allergic skin reaction
- H319: Causes serious eye irritation
- H331: Toxic if inhaled
- H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H350: May cause cancer
- H361: Suspected of damaging fertility or the unborn child
H371 May cause damage to organs
H372 Causes damage to organs through prolonged or repeated exposure

GHS Precautions

P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P260 Do not breathe dust/fume/gas/mist/vapours/spray
P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P264 Wash hands thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P271 Use only outdoors or in a well-ventilated area
P272 Contaminated work clothing should not be allowed out of the workplace
P280 Wear protective gloves/protective clothing/eye protection/face protection
P281 Use personal protective equipment as required
P285 In case of inadequate ventilation wear respiratory protection
P311 Call a POISON CENTER or doctor/physician
P314 Get Medical advice/attention if you feel unwell
P321 Specific treatment is urgent (see Section 4 First Aid measures)
P331 Do NOT induce vomiting
P362 Take off contaminated clothing and wash before reuse
P363 Wash contaminated clothing before reuse
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352 IF ON SKIN: Wash with soap and water
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P308+P313 IF exposed or concerned: Get medical advice/attention
P309+P311 IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician
P332+P313 If skin irritation occurs: Get medical advice/attention
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention
P337+P313 Get medical advice/attention
P342+P311 Call a POISON CENTER or doctor/physician
P405 Store locked up
P403+P233 Store in a well ventilated place. Keep container tightly closed
P501 Dispose of contents/container in accordance with Section 13

Signal Word: Danger

3. Composition/Data on Components:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS number</th>
<th>Weight Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates, petroleum, heavy thermal cracked</td>
<td>64741-81-7</td>
<td>40.00% - 50.00%</td>
</tr>
<tr>
<td>Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1),</td>
<td>57516-88-8</td>
<td>30.00% - 40.00%</td>
</tr>
<tr>
<td>polymer with 1,3-diisocyanatomethylbenzene</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. First Aid Measures:

**After Inhalation:** May cause severe irritation to upper respiratory tract and lungs, respiratory sensitization, decreased lung capacity, liver effects, cholinesterase depression, gastrointestinal distress, and neurological disorders. Remove from exposure area. Administer oxygen or artificial respiration as needed. Obtain medical attention.

**After Eye Contact:** Rinse opened eye for at least 15 minutes under running water. Remove contact lenses if present and easy to do so, and continue rinsing.

**After Skin Contact:** Remove contaminated clothing. Clean affected area with soap and plenty of water. Call a physician if irritation develops.

**After Swallowing:** Do not induce vomiting. If conscious, give 1 to 2 cups of milk or water to drink. Consult a physician at once.

**Notes to Physician:** Treat symptomatically. Following severe exposure the patient should be kept under medical review for at least 48 hours.

5. Fire Fighting Measures:

- **Flash Point:** 121 C (250 F)
- **LEL:** N/A
- **UEL:** N/A
- **Suitable Extinguishing Agents:** Water spray, CO2, Foam, Dry chemical
- **Information about Protection against Explosions and Fires:** Closed containers may rupture when exposed to extreme heat.
- **Dangerous Products of Decomposition:** Oxides of carbon, oxides of nitrogen, and traces of HCN.
- **Protective Equipment:** Firefighters should wear a pressure demand self-contained breathing apparatus and protective clothing.

6. Accidental Release Measures:

- **Person-Related Safety Precautions:** Evacuate all non-essential personnel. Avoid contact with skin. Do not breathe aerosols or vapors.
- **Measures for Environmental Protection:** Cover and contain spill with absorbent material. Place in open container. Remove to well ventilated area and dilute with ammonia solution (water 90%, concentrated ammonia 8%, detergent 2%). Collect for proper disposal according to local, state, and federal regulations.
7. Handling and Storage:

Information for Safe Handling: Do not breathe fumes, vapors or mists. Use only with adequate ventilation. Avoid contact with skin or eyes. Immediately report spills or leaks.

Storage Requirements: Store in dry, well ventilated area. Keep containers tightly closed. Store between 60°F-100°F.

8. Exposure Controls and Personal Protection:

<table>
<thead>
<tr>
<th>Chemical Name / CAS No.</th>
<th>OSHA Exposure Limits</th>
<th>ACGIH Exposure Limits</th>
<th>Other Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates, petroleum, heavy thermal cracked</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>64741-81-7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,3-diisocyanatomethylbenzene 67946-88-8</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Solvent naphtha, petroleum, heavy aromatic 64742-94-5</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Toluene Diisocyanate, mixed isomers 26471-62-5</td>
<td>20 ppb PEL</td>
<td>5 ppb STEL 1 ppbTWA</td>
<td>Not Established</td>
</tr>
<tr>
<td>Naphthalene 91-20-3</td>
<td>10 ppm TWA; 50 mg/m³ TWA</td>
<td>10 ppm TWA</td>
<td>NIOSH: 10 ppm TWA; 50 mg/m³ TWA 15 ppm STEL; 75 mg/m³ STEL</td>
</tr>
<tr>
<td>Polycyclic aromatic hydrocarbons 130498-29-2</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

Engineering Controls: Use local exhaust ventilation to maintain airborne concentrations below the TLV, especially if heating or spraying. Use only in a well ventilated area to keep vapors below exposure limits. Use local exhaust ventilation if necessary.

General Protective and Hygienic Measures: Usual precautionary measures should be adhered to when handling chemicals.

Personal Protective Equipment:
Respiratory Protection: Do not inhale vapors. Use NIOSH approved respiratory protection if TLV/PEL is exceeded. Do not enter storage area unless adequately ventilated.
Hand Protection: Protective butyl rubber or nitrile rubber gloves.
Eye Protection: Chemical safety goggles.
Body Protection: Protective work clothing. Launder separately.
9. Physical and Chemical Properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Brown liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Pungent</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.01</td>
</tr>
<tr>
<td>Boiling range</td>
<td>280°C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Explosive Limits</td>
<td>N/A</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>550°C</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>N/A</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting point</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash point</td>
<td>250°F, 121°C</td>
</tr>
<tr>
<td>Flammability</td>
<td>N/A</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>N/A</td>
</tr>
<tr>
<td>(n-octanol/water)</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>N/A</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity:

- Incompatible Materials: Avoid contact with water, amines, strong bases, and alcohols.

- Hazardous Polymerization: Not expected to occur.

- Dangerous Products of Decomposition: Oxides of carbon, oxides of nitrogen, hydrocarbons, isocyanates, and traces of HCN.

11. Toxicological Information:

- Mixture Toxicity
  - Inhalation Toxicity LC50: 3mg/L

- Component Toxicity
  - Naphthalene
    - Oral LD50: 1,110 mg/kg (Rat) Dermal LD50: 1,120 mg/kg (Rabbit)

- Toxicity Values Listed if Known

  - Acute Health Effects:
    - Eyes: Severe irritation, tearing, swelling, and possible damage to cornea.
    - Skin: Irritation, redness, swelling, skin sensitization, rash, scaling, and blistering.
    - Inhalation: Mucous membrane and respiratory tract irritation, tightness of chest, isocyanate sensitization.
    - Ingestion: Irritating and corrosive to mouth, stomach, and digestive tract.

  - Chronic Health Effects: May produce toxic liver, thymus, bone marrow and blood effects.

  - Isocyanates may cause skin and respiratory sensitivity in some individuals. Sensitized individuals may react to very low levels diisocyanates below the PEL. Sensitized people who continue to work with diisocyanates may develop symptoms sooner after each exposure. Limited evidence of possible carcinogenic effects.

  - Conditions Aggravated by Exposure: Asthma, respiratory disorders, skin allergies, eczema

- Routes of Entry: Inhalation, ingestion, skin contact, eye contact

- Target Organs: Respiratory track, eyes, skin, liver

- Chemicals with known or possible carcinogenic effects:
<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Description</th>
<th>% Weight</th>
<th>Carcinogen Rating</th>
</tr>
</thead>
</table>

SDS for: TyrFil EcoFlex, Flex, Pro, Utility Isocyanate Component

Printed: 12/7/2016 at 2:19:35PM
### 12. Ecological Information:

**General Information:** Based on experience, no adverse effects are expected if correct disposal procedures have been followed as indicated in section 13.

If released to waterways, material can foul shoreline and may be harmful to aquatic life.

Individual component ecotoxicity listed if known.

#### Component Ecotoxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>96 Hr LC50 Brachydanio rerio: 48 mg/L [semi-static]</th>
<th>96 Hr LC50 Pimephales promelas: 19 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 2.34 mg/L; 96 Hr LC50 Lepomis macrochirus: 1740 mg/L [static]; 96 Hr LC50 Pimephales promelas: 45 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 41 mg/L; 48 Hr EC50 Daphnia magna: 0.95 mg/L</th>
<th>96 Hr LC50 Pimephales promelas: 5.74 - 6.44 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 1.6 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 0.91 - 2.82 mg/L [static]; 96 Hr LC50 Pimephales promelas: 1.99 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 31.0265 mg/L [static]; 48 Hr LC50 Daphnia magna: 2.16 mg/L; 48 Hr EC50 Daphnia magna: 1.96 mg/L [Flow through]; 48 Hr EC50 Daphnia magna: 1.09 - 3.4 mg/L [Static]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates, petroleum, heavy thermal cracked</td>
<td>Solvent naphtha, petroleum, heavy aromatic</td>
<td>Naphthalene</td>
<td></td>
</tr>
</tbody>
</table>

#### 13. Disposal Considerations:

**Recommendation:** Observe local requirements. Dispose of in accordance with local/state/federal regulations.

#### 14. Transport Information:

**DOT Regulated Components:**
- 2,4-Toluene Diisocyanate
- 2,6-Toluene Diisocyanate

Reportable Quantity: 100 lbs

When in individual containers of less that the substance RQ, this material ships as:

<table>
<thead>
<tr>
<th>Agency</th>
<th>Proper Shipping Name</th>
<th>UN Number</th>
<th>Packing Group</th>
<th>Hazard Clas</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICAO/IATA</td>
<td>Environmentally Hazardous Substance, N.O.S. (Contains Aromatic Hydrocarbons)</td>
<td>3082</td>
<td>III</td>
<td>9</td>
</tr>
<tr>
<td>IMDG</td>
<td>Environmentally Hazardous Substance, N.O.S.</td>
<td>3082</td>
<td>III</td>
<td>9</td>
</tr>
</tbody>
</table>
Containers above RQ ship as:

<table>
<thead>
<tr>
<th>Agency</th>
<th>Proper Shipping Name</th>
<th>UN Number</th>
<th>Packing Group</th>
<th>Hazard Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>Toluene Diisocyanate</td>
<td>2078</td>
<td>II</td>
<td>6.1</td>
</tr>
<tr>
<td>ICAO/IATA</td>
<td>Toluene Diisocyanate</td>
<td>2078</td>
<td>II</td>
<td>6.1</td>
</tr>
<tr>
<td>IMDG</td>
<td>Toluene Diisocyanate</td>
<td>2078</td>
<td>II</td>
<td>6.1</td>
</tr>
</tbody>
</table>

15. Regulatory Information:

OSHA HAZARD COMMUNICATION STANDARD: This material is classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

SARA 311/312 Hazard Categories: Acute health hazard, chronic health hazard.

California Proposition 65
(Safe Drinking Water and Toxic Enforcement Act of 1986)
This product contains no substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute unless otherwise listed:

Warning: This product contains chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm:
- Polycyclic aromatic hydrocarbons 130498-29-2 410 PPM CARC
- Naphthalene 91-20-3 0.1 to 1.0 % CARC
- Toluene Diisocyanate, mixed isomers 26471-62-5 1 to 5 % CARC

Massachusetts Right To Know List:
- Naphthalene 91-20-3 0.1 to 1.0 %
- Toluene Diisocyanate, mixed isomers 26471-62-5 1 to 5 %

New Jersey Right To Know List:
- Naphthalene 91-20-3 0.1 to 1.0 %
- Toluene Diisocyanate, mixed isomers 26471-62-5 1 to 5 %

Pennsylvania Right To Know List:
- Naphthalene 91-20-3 0.1 to 1.0 %
- Toluene Diisocyanate, mixed isomers 26471-62-5 1 to 5 %

SARA 302 Extremely Hazardous Substances:
- Toluene Diisocyanate, mixed isomers 26471-62-5 1 to 5 %

Chemicals subject to SARA 313 Reporting:
- Naphthalene 91-20-3 0.1 to 1.0 % Emissions
- Toluene Diisocyanate, mixed isomers 26471-62-5 1 to 5 % Emissions

All Substances Listed on TSCA Inventory Unless Noted:
- None

16. Other Information:

Safety Data Sheet issued by Product Safety Department
This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Accella Tire Fill Systems. The data on these sheets relates only to the specific material designated herein. Accella Tire Fill Systems assumes no legal responsibility for use or reliance upon this data. It is the user's responsibility to ensure that their activities comply with federal, state, or local laws.

**THIS PRODUCT CONTAINS TDI AND IS FOR INDUSTRIAL OR COMMERCIAL USE ONLY. NOT FOR USE BY CONSUMERS OR SALE OR RESALE TO CONSUMERS.**

Date revised: 2016-12-06
Date Prepared: 12/7/2016
Reviewer Revision 0